



# RSA Archer Weekly Customer Friday's Free Webcast

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RSA Archer Technical Support

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# Data Feed Performance

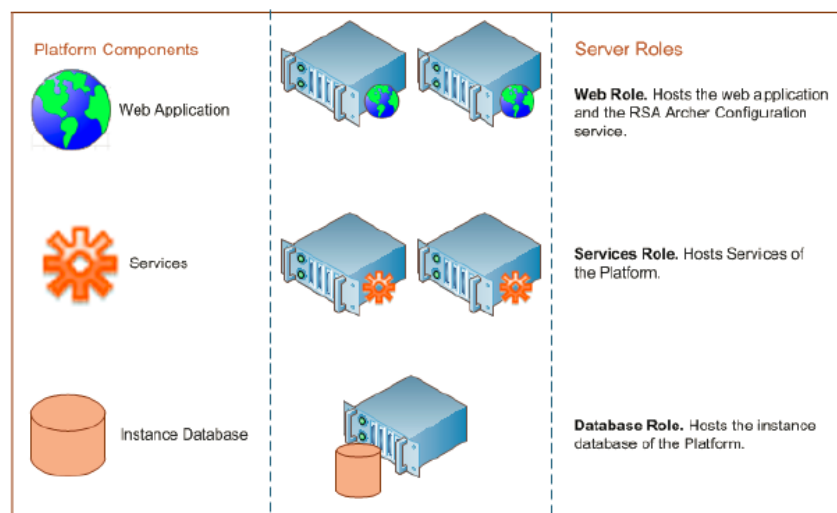
- Environment Configuration
- Data Feed Tokens
- Case Studies

# Environment Configuration

# System Architecture

If the environment has two or more moderately complex data feeds that run per day, it is recommended to deploy a multi-host configuration which includes the following components:

1. Web Server
2. Archer Services Server
3. Database Server



For specific server sizing recommendations, see the RSA Archer sizing guide.

<https://community.emc.com/docs/DOC-28761>

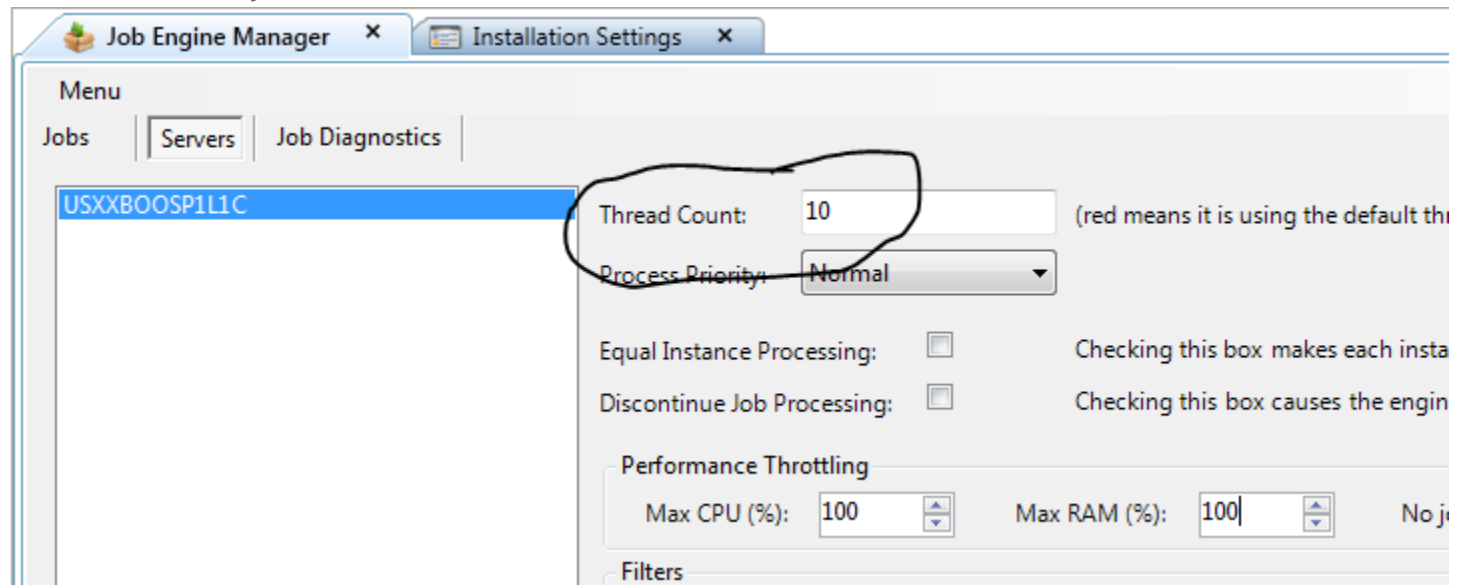
# Job Server Configuration

The Job Engine Manager is a helpful tool to assist in managing the job engine. It is located in the RSA Archer Control Panel › Plugins Menu.

The screenshot shows the Job Engine Manager configuration window. At the top, there is a 'Menu' bar with 'Jobs', 'Servers', and 'Job Diagnostics' tabs. The 'Jobs' tab is active, and a list on the left shows a job named 'USXXBOOSP11C'. To the right of this list are configuration options: 'Thread Count' is set to 10, 'Process Priority' is 'Normal', and there are checkboxes for 'Equal Instance Processing' and 'Discontinue Job Processing'. Below these are 'Performance Throttling' settings for 'Max CPU (%)' and 'Max RAM (%)', both set to 100. The bottom section is titled 'Filters' and contains three columns: 'Instances' (with 'Archer' and 'Archer44'), 'Priorities' (with 'SystemRealTime', 'SystemHigh', 'SystemLow', 'RealTime', 'VeryHigh', 'High', 'Medium', 'Low', 'VeryLow'), and 'Job Types' (with a long list of job types like 'AutomaticUserAcco', 'ContentHistoryLogC', etc.). At the bottom right, there is an 'Update' button.

# Job Server Configuration (continued)

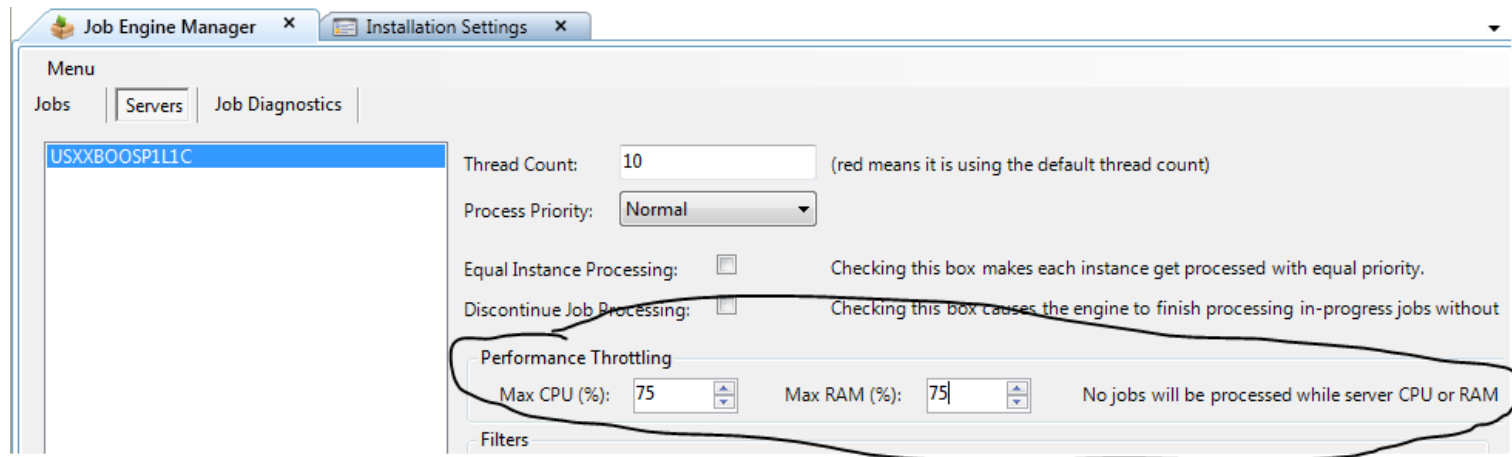
To increase the number of jobs that can be run at once, adjust the number of threads. Increasing the number of threads can increase the number of data feeds that can be processed at once:



Disclaimer: Increasing the thread count can cause the CPU utilization to increase. Monitor the CPU utilization after the thread count is increased to ensure that the server does not get over allocated.

# Job Server Configuration (continued)

The Job Engine Manager allows performance throttling to assist in keeping the server from over allocating:



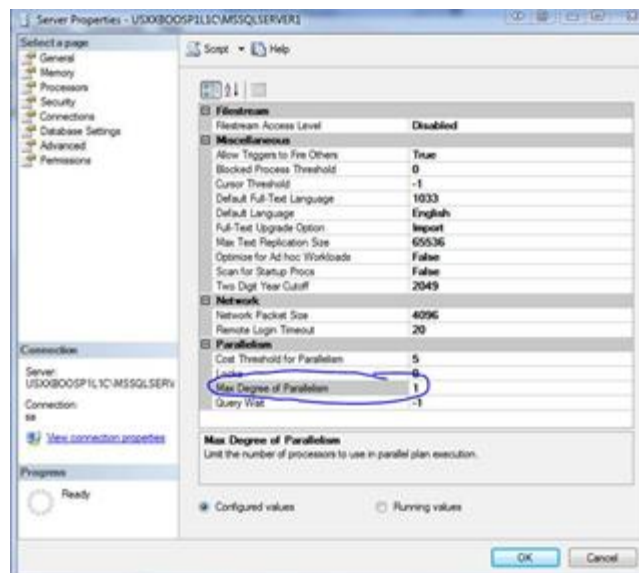
When the job engine manager is configured as it is in the above screen shot, no additional jobs will be processed if the CPU or RAM utilization have been met. Jobs that are currently running will still process.

# Database Configuration

Ensure that the Max Degree of Parallelism is set to 1.

To set the Max Degree of Parallelism setting, follow these steps:






- Open SQL Server Management Studio and log in to the necessary server.
- Right click the server name and choose properties
- Go to Advanced Section
- Set the “Max Degree of Parallelism” setting to 1





# Database Configuration (continued)

Ensure that the RSA Archer Database jobs have been deployed. To check, go to SQL Server Management Studio> SQL Server Agent> Jobs

- [-]  SQL Server Agent
  - [-]  Jobs
    -  RSA Archer Database Index Rebuild (ArcherInstance)
    -  RSA Archer Database Statistics Update (ArcherInstance)
    -  ..

# Database Configuration (continued)

If you process many records through data feeds or other means, your RSA Archer database tables can become highly fragmented.

It is recommended to schedule the RSA Archer Database Index Rebuild job to run at least once per day to reduce the fragmentation of tables in the database.

# Data Feed Tokens

# What are Data Feed Tokens?

Data Feed Tokens are additional parameters that you can alter to change how your data feeds function. They can:

1. Specify a value that is not known until the DF runs
2. Modify Parameters in Certain Feeds
3. Configure the behavior of a data feed.

Certain tokens can also be used to increase performance in various ways. The 3 biggest performance altering tokens are:

1. The ExecuteCalcs Token
2. The CrossReferencesMode Token
3. The RelatedReferencesMode Token

# The ExecuteCalcs Token

The ExecuteCalcs token can be used to exclude calculated fields from running on records created/alterd by a Data Feed. This is a Boolean value and is set to True by default.

While set to True – the data feed will process calculated fields normally.

While set to False – the data feed will not calculate or recalculate any calculated fields.

Setting this token to False can greatly improve performance for large data sets. But the trade off is that a Full System Recalculation must be done for each Application that had content updated by the Data Feed. If the recalc is not done, it is possible to run into data discrepancies.

# The CrossReferencesMode Token

The CrossReferencesMode token is used to exclude the content in Cross Reference fields from being updated by a Data Feed. This token is a “LinkOnly” token – meaning that it just needs to be set in order to use it.

Once set this token is set – the Feed it is configured on will no longer update content in any Cross Reference Fields. The data feed will however update the link between the two applications.

Using this can speed up a Data Feed if you are not wanting it to update content in Cross Reference fields. The performance increase varies depending on the application being referenced and number of cross references total.

# The RelatedReferencesMode Token

The RelatedReferencesMode token is used to exclude the content in Related Record fields from being updated by a Data Feed. This token is a “LinkOnly” token – meaning that it just needs to be set in order to use it.

Once set this token is set – the Feed it is configured on will no longer update content in any Related Record Fields. The data feed will however update the link between the two applications.

Using this can speed up a Data Feed if you are not wanting it to update content in Related Record fields. As with the CrossReferencesMode token - the performance increase varies depending on the application being referenced and number of related records total.

# Case Studies



# -Study 1-

## Symptom:

Data Feed running for 14 minutes sometimes – 11 hours others. Same number of records processed each time when viewing the Run Detail.

## Resolution:

1. Determined which records were actually updated when the feed ran for both 14 minutes and 11 hours.
2. Found that only a handful of records were actually updated for the 14 minute timespan while thousands were for the 11 hour timespan.
3. The field being updated was a values list with nearly 500 values – only about half of which were actually being used.
4. Determined that this was expected given the amount of data being altered. The report would return the same results every time – but the actual changes would vary.

### --Take Away Notes--

- The Run Detail displays total records processed – not total records updated.
- The time to run a DF is heavily dependent on the total changes made.
- Removing excess/not used values from a values list can also increase performance if in large quantities.

# -Study 2-

## Symptom:

Data Feed had been running in under 1 hour. Performance degraded to taking around 1.5 hours as time went on.

## Resolution:

1. Looked at the source files being used in the DF. Found they were not Archer generated. They were created by an external business user.
2. Discovered that the source files had been growing in size as more and more data was added.
3. Split the document in half and set it to run on 2 different data feeds that ran at once. This cut the run time to well below an hour for both feeds.

### --Take Away Notes--

- Data Feeds run on a single thread each. Multiple data feeds can process data faster than a single one (providing the resources are available on the server to handle the load).
- Source data coming from a source outside of Archer should be taken into consideration when running file transports. It can cause slowness more than the Feed itself if not properly configured.

# -Study 3-

## Symptom:

Data Feeds taking a long time to process. Does not matter which feeds, all seem slow. No configuration changes had been made prior to the performance hit.

## Resolution:

1. Checked the general configuration settings – saw that everything looked correct.
2. Took a look at the database to see if there was any configuration issues.
3. Discovered that 34 tables were over 35% fragmented. This was causing a negative impact on the Feed performance.
4. Suggested to have the DB be re-indexed at least once a day. This improved the performance.

--Take Away Notes--

- Database maintenance does play a part in DF performance.
- General server maintenance can also play a part in DF performance.

# Questions?

# RSA Conference / Feb.24-28

## Moscone Center, San Fran

- Don't miss this opportunity to share in the collective intelligence of the best & brightest in the information security system!
- **Register by January 24, 2014 & Save \$400 off Full Conference Pass**
- **Register today** on RSA Archer Community, or at: <http://www.rsaconference.com/events/us14/register>

# FFTH Webcast Updates

- Upcoming FFTH webcasts:
  - ›Dec. 13: REST API
  - ›Dec. 20: Self-Help Techniques
- FFTH Webcasts will return, **Friday, Jan. 17, 2014**
- FFTH Webcast **Replays** on Archer Community:  
<https://community.emc.com/docs/DOC-19083>
- Have a suggestion for a webcast topic? Want to be a presenter? Contact: [marcy.gaynes@rsa.com](mailto:marcy.gaynes@rsa.com)

# RSA Archer Thought Leader Webcast Update

- 5 Ways Identity Intelligence Can Improve Your Security in 2014
  - Thursday, Dec. 12 @ 12 Noon EST
  - Register today:  
<https://community.emc.com/events/2326>

# Contacting Support

- Email:

[archersupport@rsa.com](mailto:archersupport@rsa.com)

- Phone:

USA: 1-800-995-5095 (option 5 for Archer)

Global numbers:

<http://www.emc.com/support/rsa/contact/phone-numbers.htm>



# Resources for You



- Archer Community – private community for your use: discussion forums, blog, events, Archer downloads, on-demand videos and more
- Archer Exchange – search and download on-demand bus application for your GRC platform, download content, get tools for systems integrations
- Monthly Customer Newsletter – emailed to you
- SCOL - locate and search a support knowledgebase, download current patches and bug fixes, sign up for advisory notifications, manage cases and more

ANNOUNCEMENT: TOP EXECUTIVES SAY GRC PROGRAMS MUST BETTER ALIGN TO STRATEGIC PRIORITIES [Show Details](#) [1](#) [2](#) [3](#) [4](#)

COMMUNITIES

- GRC Ecosystem
- RSA Archer Community
- RSA Archer Exchange
- RSA Product Communities

Search RSA Archer

RECENT BLOG POSTS

- Cloud Security and Compliance – Where the heck can you start? in RSA Archer
- Gray Areas in RSA Archer
- Q2-2012 Additions to the RSA Archer eGRC Content Library in RSA Archer
- Knowing the Past, Teaching the Future: GRC Process Maturity in RSA Archer

[More >](#)

DOUBLE AD TAGS

## RSA Archer Community NEWSLETTER

Read the latest edition



The RSA Archer eGRC Community enables collaboration among RSA Archer GRC clients, partners and product experts. Members actively share ideas, vote for product enhancements, and discuss trends that help guide the RSA Archer product roadmap.

Downloads



Access an array of Archer training materials, help and reference guides, product overviews and solution content.

Discussions



Share opinions, ask questions, and exchange best practices about Archer product use and configuration.

Ideas



Submit and discuss enhancement requests. Members may cast votes for ideas that would fuel their organization's success.

Blog



Get news on industry issues and a variety of topics, ranging from product enhancements to upcoming events.

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ACTIONS

- [Start a discussion](#)
- [Create a document](#)
- [Write a blog post](#)

# Resources (continued)

- Weekly Webcasts on the core Solutions, use cases, best practices: every Thursday 2:00EDT
- Weekly Friday's Free Customer Training with Customer Support: every Friday at 12:00EDT

**RSA Archer Administrative training:** Basic and Advanced. Instructor-led, at your office or ours, online virtual, video learning and more.

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<http://www.emc.com/training/rsa-education-services/certification.htm>

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## RSA SECURITY TRAINING AND CERTIFICATION



OVERVIEW



**COURSES AND REGISTRATION**

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TRAINING CREDITS



CERTIFICATION

PAYMENT AND CANCELLATION

CONTACT INFORMATION

FAQ

### Courses and Registration

RSA Education Services provides training for core RSA products as well as RSA Archer and RSA NetWitness offerings. Various media are available to meet customer schedules and budgets as well as to accommodate individual learning styles.

#### Training Options

- **Instructor-led** — Classroom-based training delivered globally by experienced training professionals.  
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- **Online Virtual** — A live instructor with students logging into their training session remotely. Lecture, demos, student materials, and lab exercises are included just like a traditional classroom experience.  
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- **Video ILT** — Provides the student with instructor-led video learning that is packaged in a convenient self-paced CD format with an intuitive navigation menu. Lecture content, lab exercises, and student materials are identical to classroom training.  
[View courses and register.\\*](#)
- **eLearning** — Offers students the ability to start and stop their learning at will and participate at a pace that suits their schedules. RSA's eLearning offerings are interspersed with lecture segments as well as practical simulations.  
[View courses and register.\\*](#)



THANK YOU

